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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

E. SELLERS et al.

Application No.: 10/715,548

Filed: November 19, 2003

Attorney Docket No. 62805.000040

Art Unit: Unassigned

Examiner: Unassigned

For: USE OF INHIBITORS OF CYP2A6 FOR REGULATING NICOTINE METABOLISM

### INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, Applicants respectfully request consideration of the reference listed on the attached Form PTO-1449. Since copies of the cited references were previously submitted in prior U.S. Patent Application No. 09/214,851 (Attorney Docket No. 62805.000005) by the Applicants and is a case to which the present case claims priority, copies of the cited references are not being submitted herewith. For the Examiner's convenience a copy of the signed PTO-1449 from the priority case is provided. Applicants will provide any reference listed at the request of the Examiner.

Additionally, Applicants bring to the Examiner's attention related case 09/584,669 (Attorney Docket No. 62805.000020). A copy of the references cited therein are also cited to the Examiner.

Applicants respectfully point out that the submission of the listed document in this

Information Disclosure Statement is not an admission that it is a prior art or that it is material to

Attorney Docket No. 62805.000040 Application Serial No. 10/715,548

patentability of any claims of the application. Also, the submission of this Information Disclosure Statement is not an indication that a search has been made.

Applicants respectfully request that the Examiner consider the reference cited on the Form PTO-1449 and that the Examiner indicate that the reference has been considered in this application by returning a copy of the Form PTO-1449 with the Examiner's initials in the left column per MPEP 609.

This IDS is submitted prior to the issuance of a first Office Action on the merits; therefore, it is believed that no fees are required in connection therewith. If any fees are necessitated by the filing of this Information Disclosure Statement, please charge the undersigned's Deposit Account No. 50-0206.

> Respectfully submitted, **HUNTON & WILLIAMS LLP**

By:

Jeffrey T. Perez

Registration No. 52,110

Hunton & Williams, LLP 1900 K Street, N.W., Suite 1200 Washington, D.C. 20006-1109 (202) 955-1500 (Telephone) (202) 778-2201 (Facsimile)

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				U.S. PA	TENT DOCUMEN	TS				
Examiner Initials *	Cite No.1	U.S. Patent Do		ument Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document		Date of Publication of Cited Document MM-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	1.	565	3987		Modi et al.		08-1997			
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	5.		NAKAJIMA, M et al., Characterization of CYP2A6 involved in 3'-hydroxylation of continine in human liver microsomes, J. Pharmacol. Exp. Therap., (1996), Vol. 277, No. 2, pp. 1010-1015							
	6.		NAKAJIMA, M. et al., Role of human cytochrome P4502A6 in C-oxidation of nicotine, Drug Metabol. Disp. (1996), Vol. 24, No. 11, pp. 1212-1217							
	7.	L	TSUJIMOTO, A. et al., Potent inhibitory action of pilocarpine on hepatic drug metabolism, Jpn. J. Pharmacol., (1972) Vol. 22, No. 5, 736							

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Substitute for form 1449A/PTO Complete if Known 10/715,548 **Application Number** INFORMATION DISCLOSURE November 19, 2003 Filing Date STATEMENT BY APPLICANT E. SELLER et al. First Named Inventor Group Art Unit Unassigned (use as many sheets as necessary) **Examiner Name** Unassigned 2 62805.000040 Sheet Attorney Docket Number

	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS								
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²						
	8.	FOTH, H. et al., Nicotine metabolism in isolated perfused ling and liver of phenobarbital- and benzoflavone-treated rats, Arch. Toxicol., (1991) Vol. 65, No. 1, pp. 68-72							
	9.	KYEREMATEN, G. A. et al., Metabolism of nicotine by hepatocytes, Biochem. Pharmacol., (1990) Vol., No. 8, pp. 1747-1756							
	10.	YAMAZAKI, H. et al., Cytochrome P450 sE1 and 2A6 enzymes as major catalysts for metabolic activation of mitrosodialkylamines and tobacco-related nitrosamines in human liver microsomes, Carcinogenesis (1992) Vol. 13, No. 10, pp. 1789-1794							
	11.	CAPLUS, DN 120:138085, Garnitskij et al., SU 1803032 A1, 1993/03/23, english abstract with notes from oral translation							
	12.	MAYS et al., Methoxsalen is potent inhibitor of caffeine in humans, Clin. Pharmacol. Ther., 42:621-626 (1987)							
	13.	MAENPAA et al., Biochem. Pharmacol., 48(7), (1994), 1363-9							
	14.	BENOWITZ, N. L. et al., Deficient c-oxidation of nicotine, Clinical Pharmacology and Therapeutics, 57(5): 590-594 (1995) (Abstract)							
	15.	Copy of International Search Report dated June 6, 1999							

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2000							A6 involv 2, pp. 101		droxylation of contini	ne in hui	man liver mi	rosom	es", J.	
3			et al., "R 1212-12		ıman cyt	tochrom	e P4502A	6 in C-oxi	dation of nicotine", Da	rug Mete	abol. Dispos.	, (1996	i) Vol.	
4		oto, A., 5, 736.		otent in	hibitory	action o	f pilocarp	ine on hep	oatic drug metabolism'	', Jpn. J.	Pharmacol.	, (1972	!) Vol.	
5	Tsujim Pharma	oto, A.,	et al., " 977) Vol	'A study I. 26, No	of the 1 . 21, pp.	nature o 2072-20	f pilocarj 074.	oine inhibi	tion of hepatic drug-r	netaboli	zing enzyme	s", Bio	schem.	
6	Foth, H	I., et al.,	, "Nicoti (1991) \	ne Meta Vol. 65, l	bolism ii No. 1, pp	n isolate . 68-72.	ed perfuse	d lung and	l liver of phenobarbita	al- and b	enzoflavone	treated	rats",	
7	Kyeren 1756.	naten, G	.A., et a	l., "Meta	bolism c	of nicoti	ne by hep	atocytes",	Biochem. Pharmacol.	, (1990)	Vol. 40, No.	8, pp.	1747-	
8	Yamazaki, H., et al., "Cytochrome P450 sE1 and 2A6 enzymes as major catalysts for metabolic activation of N-nitrosodialkylamines and tobacco-related nitrosamines in human liver microsomes", Carcinogenesis (1992) Vol. 13, No. 10, pp. 1789-1794.													
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# Notice of References Citied Examiner Cybille Delacroix-Muirheid Applicant(s)/Patent Under Reexamination SELLERS ET AL. Art Unit Page 1 of 1

#### U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	Α	US-5,653,987	08-1997	MODI et al.	424/400
	В	US-			
	С	US-			
	D	US-			
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### FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification		
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### **NON-PATENT DOCUMENTS**

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	U	CAPLUS, DN 120:238085, Garnitskij et al., SU 1803032 A1, 1993/03/23, english abstract with notes from oral translation.							
	٧	MAYS et al., Methoxsalen is a Potent Inhibitor of Caffeine in Humans, Clin. Pharmacol. Ther., 42: 621-626 (1987).							
	w	MAENPAA et al., Biochem. Pharmacol., 48(7), (1994), 1363-9.							
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